

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-029231**Date Inspected:** 07-Mar-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** As noted below.**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower**Summary of Items Observed:**

Quality Assurance Inspector (QA) William Clifford was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

**Ultrasonic Testing of ESW****ESW F, Face A:**

This QA performed continued Ultrasonic Testing (UT) on approximately 500mm of Tower Electroslag Complete Joint Penetration (CJP) shear plate weld designated as "ESW F" face A. Location (Y=5000~5500) of this weld was inspected using this testing method.

This QA observed two (2) recordable longitudinal indications at the time of testing.

This QA observed two (2) recordable transverse indications at the time of testing.

This QA performed UT of weld designated as "ESW F" in accordance with the approved supplemental procedure for confirmation and evaluation of planar type defects. Tandem report for work performed on this date will be completed by QC technician and signed by both QA/QC parties. Items listed on tandem report reflect indications agreed upon by QA/QC. Please see TL-6027 for complete listing of QA recorded indications.

**Electroslag Weld Committee**

This QA attended a meeting in the Tower ESW work area at the 9m elevation.

During this meeting this QA performed information only Ultrasonic Testing (UT) of ESW F for those in attendance to provide examples of previously discovered transverse and planar indications discovered during QC and QA

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tandem Ultrasonic Testing.

In preparation for this meeting this QA performed pre-inspection procedural testing together with SMR Aaron Prchlik and QA Art Peterson; in order to research the accuracy of the proposed “pitch-catch” Ultrasonic Testing method for use in testing ESW welds. The primary purpose of the “pitch-catch” method as it is proposed is to ascertain the planar aspects of longitudinal indications previously discovered using the conventional shear wave method of UT.

Information only testing is still in process and findings will be used to produce an approved testing procedure at a later time.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

Conversation was relevant to testing performed during this shift.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Clifford,William	Quality Assurance Inspector
<b>Reviewed By:</b>	Mertz,Robert	QA Reviewer

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